

ARIZONA BUGBANE
(Cimicifuga arizonica)
CONSERVATION AGREEMENT

December 1998

U.S. Forest Service
Coconino National Forest
Kaibab National Forest
Tonto National Forest

U.S. Fish and Wildlife Service
Arizona Ecological Services Field Office

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(Cimicifuga arizonica)
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TABLE OF CONTENTS

	Page
I. Introduction	1
II. Purpose	2
Conservation Goals and Objectives.	2
III. Authority	3
A. Involved Parties	3
B. Authorities.	3
IV. Statement of Mutual Benefit	4
V. Responsibilities	4
A. U.S. Forest Service.	4
B. U.S. Fish and Wildlife Service	5
C. U.S. Forest Service and U.S. Fish and Wildlife Service	6
VI. Agreement Term.	6
VII. Special Provisions	7
Approval Signatures	8-13

APPENDIX

Arizona Bugbane (*Cimicifuga arizonica*) Conservation Assessment and Strategy, Coconino and Kaibab National Forests, May 1995.

A Conservation Assessment for Arizona Bugbane (*Cimicifuga arizonica*), Tonto National Forest, 1993-1997.

A Conservation Strategy for Arizona Bugbane (*Cimicifuga arizonica*), Tonto National Forest

ARIZONA BUGBANE CONSERVATION AGREEMENT

I. INTRODUCTION

This conservation agreement addresses the management of Arizona bugbane (*Cimicifuga arizonica*). Final approval of the Arizona Bugbane Conservation Agreement represents a commitment by the U.S. Forest Service through the Coconino, Kaibab, and Tonto National Forests, and by the U.S. Fish and Wildlife Service to manage sensitive plant resources in a manner consistent with each agency's policies in order to ensure that species do not become threatened or endangered. This agreement incorporates the management direction and commitments stated in Arizona Bugbane (*Cimicifuga arizonica*) Conservation Assessment and Strategy for the Coconino and Kaibab National Forests (USDA Forest Service 1995), A Conservation Assessment for Arizona Bugbane (*Cimicifuga arizonica*) on the Tonto National Forest (USDA Forest Service 1993), and A Conservation Strategy for Arizona Bugbane (*Cimicifuga arizonica*) on the Tonto National Forest (USDA Forest Service 1998) (see Appendix for all).

Arizona bugbane is an herbaceous perennial plant which may grow to six feet in height. It is in the crowfoot or buttercup family (Ranunculaceae). Arizona bugbane occurs within mixed conifer and high elevation riparian deciduous forests. It is found in areas of deep shade and moist soils with a high humus content, near perennial or intermittent streams or seeps between 1606 to 2515 meters in elevation (5,300 to 8,300 feet). Arizona bugbane occurs in mesic habitats, typically along the bottoms and lower slopes of steep, narrow canyons, where the dense overstory often includes a combination of coniferous and deciduous tree species. This special combination of environmental features which contribute to Arizona bugbane habitat also supports a high diversity of other species of plants and animals, including rare and sensitive species such as the Mexican spotted owl (*Strix occidentalis lucida*).

Arizona bugbane is known only from central Arizona, within Coconino and Gila counties. All known populations occur within three National Forests, the Coconino, Kaibab, and Tonto. Each population of Arizona bugbane is of limited areal extent and numbers of plants. These populations are highly vulnerable to habitat degradation and loss. Impacts to Arizona bugbane habitats and populations have occurred in the past. Current and potential threats include degradation of the integrity of the ecosystem upon which the species depends, herbivore/ungulate impacts, recreational impacts, and natural and management influenced catastrophic events such as floods and fires.

Arizona bugbane is a Forest Service sensitive species and is presently a candidate species for listing under the Endangered Species Act of 1973, as amended. Recommendations have been made to the Fish and Wildlife Service to list this species as threatened (Fletcher 1979, and Phillips et. al. 1982). Arizona bugbane had been included in the settlement agreement under the Fund for Animals lawsuit (Fund for Animals et al. vs. Lujan) and resolution of the listing status is required within the 1999 federal fiscal year.

II. PURPOSE

The purpose of this Conservation Agreement is to provide for the long-term conservation of Arizona bugbane through proactive management of the species and its ecosystems. The conservation of Arizona bugbane will require improving protection at some sites and restoring the natural processes of these ecosystems. These habitat protection efforts are expected to also benefit many other species of plants and animals which share these ecosystems. Ensuring Arizona bugbane population viability and stability throughout its range will require management initiative and effort. Following are the management goals and objectives for Arizona bugbane conservation.

Conservation Goals and Objectives

The following goals and objectives define the management direction established by each Forest through the individual Forest's Arizona Bugbane Conservation Assessment and Strategy documents. Through the implementation of the provisions of this agreement, as based on the best available information on the species, these measures are believed to be sufficient to ensure the long-term survival and conservation of Arizona bugbane and its ecosystems throughout its natural range.

These goals and objectives are to:

- A. Protect and maintain the existing populations of Arizona bugbane to ensure their long-term viability and conservation on the Forests.
- B. Develop opportunities to increase the number or size of populations of Arizona bugbane on the Forests increasing its potential at the species level.
- C. Address potential opportunities for populations of Arizona bugbane within the context of restoration and conservation of the riparian and mixed-conifer ecosystems of which they are a component.

Specific objectives developed to lead to attainment of these goals are to:

- 1. Implement current Forest Land and Resource Management Plan Standards and Guidelines where applicable. Change or develop new guidelines if current Guidelines are inadequate or additional guidelines are needed.
- 2. Develop thresholds of acceptable impacts to individuals and populations.
- 3. Prevent and/or alleviate significant negative impacts of management activities to populations and their associated habitats.

4. Conduct monitoring and initiate adaptive ecosystem management where appropriate.
5. Incorporate agency commitments from this agreement into resource management plans to ensure consistent and complete implementation of these strategies.
6. Encourage research opportunities within the Forest Service and with other agencies or private groups.

III. AUTHORITY

A. Involved Parties:

1. U.S. Department of Agriculture, Forest Service
2. U.S. Department of the Interior, Fish and Wildlife Service

B. Authorities:

Endangered Species Act of 1973, as amended, section 2, establishes the Act's purpose to, "...provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved..." Section 5 of the Act directs the Secretaries of the Department of Agriculture and Department of the Interior to "...establish and implement a program to conserve [threatened and endangered] fish, wildlife, and plants..."

National Forest Management Act (1976) directs the Forest Service to "maintain viable populations of all native and desired non-native wildlife, fish, and plant species in habitat distributed throughout their geographic range on National Forest System lands."

Forest Service Manual (FSM 2670) on endangered, threatened, and sensitive species directs the agency to "Develop and implement management practices to ensure that [sensitive] species do not become threatened or endangered because of Forest Service actions."

The national interagency Memorandum of Understanding for the conservation of species tending towards federal listing issued on January 25, 1994 (94-SMU-058) provides agency direction for the establishment of conservation agreements.

IV. STATEMENT OF MUTUAL BENEFIT

It is mutually beneficial for the parties involved to secure populations of Arizona bugbane from habitat loss and degradation. Arizona bugbane will benefit from instituting conservation measures that provide the widest possible improvement in the abundance, diversity, and distribution of the

species. Arizona bugbane and other species will benefit from the proposed conservation actions that maintain and improve healthy riparian ecosystem functions and processes.

V. RESPONSIBILITIES

A. Forest Service Shall:

1. Have primary responsibility for implementation of specific conservation actions to protect and restore Arizona bugbane habitat and ensure that viable populations are maintained throughout its natural range on National Forest System lands.
 - 1a. Monitor recreational use on selected high-use dates at Workman Creek and Lower West Fork sites. Map and monitor informal trail development within these populations. At any time, identify impacts which may result in the long-term detriment to the species, or compromise the viability of the site. Decisions regarding recreational use in the areas will be re-evaluated in order to reduce or remove these impacts.
 - 1b. Decrease impacts of recreational activities that relate to long-term detriment to the species, or which compromise the viability of the site. Trails will be re-routed as necessary to reduce trampling of plants or soils. No new trails will be constructed within 100 feet of existing Arizona bugbane plants.
 - 1c. Manage ungulate grazing and browsing so there is no long-term detriment to the species, nor compromising of the viability of the site. Long-term detriment will vary according to the attributes of each site, and will be determined by monitoring and coordination between the Forest Service and the Fish and Wildlife Service. Verify and maintain integrity of pasture fencing prior to livestock use of pastures near or containing Arizona bugbane.
 - 1d. Provide appropriate buffers around timber harvest activities to maintain Arizona bugbane population integrity. Provide adjacent habitat sufficient to maintain the appropriate microenvironments for the species.
2. Conduct detailed monitoring (level 1) at each selected site as identified in the Forests' strategies (Bill Williams, James Canyon, Maple Springs, Upper West Fork, West Clear Creek, Workman Creek) every five years, on a rotating schedule. Monitor all other populations with broad sampling methods every five years, to be implemented on a rotating schedule. At Workman Creek and Lower West Fork, broad sampling protocol will be implemented each year when detailed monitoring is not done.

3. The corrected Kaibab National Forest Land Management Plan will be amended to incorporate the Standards and Guidelines outlined in the Arizona bugbane Conservation Assessment and Strategy on the Coconino and Kaibab National Forests for the Bill Williams Botanical Area (Management Area 6). After the new population in the Saddle Mountain Wilderness (Ecological Management Area 19) is inventoried and assessed, any additions or changes to the Kaibab National Forest Land Management Plan will be addressed, if necessary. Initiate incorporation of Standards and Guidelines outlined in Tonto National Forest Land and Resource Management Plan as soon as strategy is completed.
4. Evaluate establishment of special management areas such as Botanical Areas or Research Natural Areas, especially for Workman Creek.
5. Prepare Biological Assessments and Evaluations to determine effects of planned projects within existing populations or potential habitat of Arizona bugbane Retain Arizona bugbane as a Regional and Forest sensitive species.
6. Fully involve the Fish and Wildlife Service and appropriate State agencies as cooperators or partners throughout the National Environmental Policy Act process for all projects likely to affect Arizona bugbane or its habitat.
7. Determine the extent of Arizona bugbane on Bill Williams Mountain and North Canyon, in the Sierra Ancha Mountains, and in the Oak Creek and West Clear Creek population areas, and conduct surveys in other areas of potential habitat.
8. Evaluate opportunities for conservation easements and/or land acquisition of additional important private inholdings of Arizona bugbane populations, if any become known.
9. Support studies and other scientific research to better understand the biology and ecology of the Arizona bugbane
10. Implement additional actions as detailed for the Coconino and Kaibab National Forests in tables 4 and 5 of their Conservation Assessment and Strategy, and for the Tonto National Forest within the action plan of their conservation assessment. Complete all appropriate National Environmental Policy Act compliance documentation.

B. U.S. Fish and Wildlife Service Shall:

1. Provide technical assistance in the implementation of this Conservation Agreement and ensure adequate protection and management is occurring.

2. Assess listing Arizona bugbane under the Endangered Species Act if implementation of this agreement is not occurring, or if the conservation measures prove to be inadequate to protect the species or its habitat. Listing would follow the normal rulemaking process.
3. Become fully involved throughout the NEPA progress for all projects likely to affect Arizona bugbane or its habitat (reference #6 above).

C. U.S. Forest Service and U.S. Fish and Wildlife Service Shall:

1. Work together to implement the Arizona Bugbane Conservation Agreement, to manage, protect, and restore the ecosystems upon which the Arizona bugbane and other species depend.
2. Ensure outyear budget needs and botanical staffing are programmed to facilitate implementation of the actions identified for the respective agencies.
3. Annually review implementation of the provisions of this agreement. Coordinate development of monitoring protocol, and sharing of data and information, conduct field reviews as needed, and provide recommendations to the Regional Forester and Regional Director on any proposed amendments to the Conservation Agreement.
4. Coordinate with appropriate State and Federal agencies on the implementation of wildlife management strategies within Arizona bugbane habitat. Provide survey and site specific data to the Arizona Game and Fish Department Heritage Data Management System.
5. Each agency has administrative responsibilities to oversee the implementation of the Arizona Bugbane Conservation Agreement. The implementation of the Arizona Bugbane Conservation Agreement requires staff time for technical supervision, review and evaluation, and project administration from various agency administrative units including: Forest Service Regional Office, Forest Supervisor Offices, Ranger District Offices, Fish and Wildlife Service Regional Office, and Ecological Services Field Office.

VI. AGREEMENT TERM:

The duration of this Agreement is for five (5) years following the date of the last signature below, at which time it may be renewed, with the consent of all parties.

The principal contacts for this agreement are:

U.S. Fish and Wildlife Service
Arizona Ecological Services State Office
2321 W. Royal Palm Road, Suite 103
Phoenix, Arizona 85021
Telephone: 602/640-2720

Coconino National Forest
2323 East Greenlaw Lane
Flagstaff, Arizona 86004
Telephone: 520/527-3600

Kaibab National Forest
800 S. 6th Street
Williams, Arizona 86046
Telephone: 520/635-8200

Tonto National Forest
2324 E. McDowell Road
Phoenix, Arizona 85006
Telephone: 602/225-5200

VII. SPECIAL PROVISIONS:

- A. This Agreement may be modified or amended as necessary upon review of the proposed amendments and written consent of Regional Forester, Southwestern Region, and the Regional Director. This agreement may be terminated by any party with a 60 day written notice to all other parties.

- B. This Agreement is neither a fiscal nor a funds obligation document. Any endeavor involving reimbursement or contribution of funds among the parties of this agreement will be handled in accordance with applicable laws, regulations, and procedures.

ARIZONA BUGBANE CONSERVATION AGREEMENT

In Witness Whereof, the parties have caused this Arizona Bugbane Conservation Agreement to be executed as of the date of the last signature below:

_____ Date: _____
Mr. Jim Golden, Forest Supervisor
Coconino National Forest
Flagstaff, Arizona

ARIZONA BUGBANE CONSERVATION AGREEMENT

_____ Date: _____
Ms. Conny J. Frisch, Forest Supervisor
Kaibab National Forest
Williams, Arizona

ARIZONA BUGBANE CONSERVATION AGREEMENT

_____ Date: _____
Mr. Charles Bazan, Forest Supervisor
Tonto National Forest
Phoenix, Arizona

ARIZONA BUGBANE CONSERVATION AGREEMENT

_____ Date: _____
Mr. David L. Harlow, Field Supervisor
Fish and Wildlife Service, Arizona Ecological Service State Office
Phoenix, Arizona

ARIZONA BUGBANE CONSERVATION AGREEMENT

_____ Date: _____
Ms. Ellie Townes, Regional Forester
USDA Forest Service, Southwestern Region
Albuquerque, New Mexico

ARIZONA BUGBANE CONSERVATION AGREEMENT

_____ Date: _____
Ms. Nancy Kaufman, Regional Director
USDI Fish and Wildlife Service, SW Region
Albuquerque, New Mexico